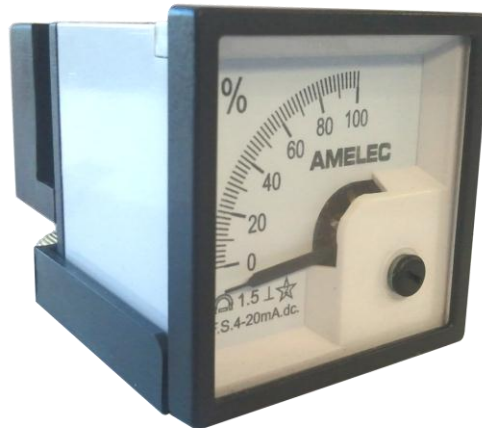


AMELEC

SIGNAL CONDITIONING

APM Series



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Cochran Close, Crownhill, Milton Keynes

MK8 0AJ

About Us

Originally formed in February 1975, AMELEC remains a wholly owned British manufacturing company celebrating our 35th year anniversary. In 2010 & 2011 we were awarded **100% score** in **quality** accreditation by the Achilles-UVDB verify scheme.

The instrumentation that AMELEC offers to the market place is based on analogue techniques, using readily available discrete components. The instruments contain no time dependent or microprocessor circuitry, are suitable for use in SIL 1, 2 or 3 rated safety systems/loops & all covered by up to 10 Year warranty.

Our design & everyday application engineering principles used in the instruments are based on well tried, proven in use for over thirty years, linear operational amplifier circuitry. Each instrument can be considered as a number of functional blocks assembled together to produce a specific control function.

A Signal Conditioner / Transmitter would comprise of an input circuit; a modulator / demodulator stage; an output circuit and the power supply/regulation circuitry. A trip amplifier might use the same input circuit, this time a comparator and relay driver stage plus the power supply / regulation circuitry.

By combining these functional blocks together we have produced a comprehensive range of Trip Amplifiers, Transmitters, Signal Converters / Isolators, Signal Splitters/Boosters, combined Trip Transmitters, Arithmetic (Add / Subtract / Select / Multiply / Divide) units, Power Supplies, Strain Gauge, Frequency & AC I/V Transducers, as well as Hart compatible units. The circuit building blocks we use today are essentially the same as the ones we have used for the last thirty years.

To confirm that the instruments are compliant with the latest standards, AMELEC have submitted a range of instruments with all the various circuit blocks in them to the test houses. The reference / standards used at the test houses have been:- the CEGB's EES1989, the BS6667, IEC801 and more recently the IEC61000. All instrumentation produced by AMELEC is controlled under our Lloyds approved **ISO 9001:2008 Quality system**.

Our vast client base is spread across all process industry sectors; originally to the likes of the CEGB, BNFL, GEC, British Gas, ICI, BP & Shell, today AMELEC continues to supply quality instrumentation to the Nuclear, Power Generation, Oil & Gas, Chemical, Pharmaceutical, Petrochem, Utilities, Food & Brewery sectors, as well as to many other general manufacturing industries & the Water Authorities throughout.

Here are some of our clients:



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Client Feedback

"I recently had one of your trip amplifiers go faulty on me. The said item is at least 21 years old, and had been in service for all this time. I was really pleased when you told me that you could supply me with a direct replacement that would not need any modifications done to make it fit. It is very rare for electronic equipment not to be obsolete after a couple of years, never mind 21 years!"

In all my dealings with your company I have always been impressed with the quality of your products. The manuals provided with each item are excellent, as is your after sales technical help. I think that your 10 years warranty speaks volumes about your faith in your products. I would never hesitate I recommending your company to anyone"



"Many thanks for your prompt response.....Great Service!"



"Thanks for the fast response."



"Thank you for the great service."



"Thanks again for the prompt response."



"Thanks for your support."



"This is just what we needed, so many many thanks."



"Many thanks for your very prompt service...we thank you for helping us on this urgent request, it is much appreciated."



"Thank you very much...please say thanks to Oscar & David."



"I'd like to thank you for your quick response to our request, and for getting the item to us on time"



"I just want to say thanks to you and your staff for your speedy response and efforts, received the unit yesterday and works a treat!"

APM489-48 Moving Coil Meter

Moving coil meters are suitable for measurement of DC current or voltage. All meters have a jewel and pivot movement which ensures reliability and Accuracy.

Technical Specifications

Input - Current

0-50uA to 0-40A direct connected
 APM489-48 25A maximum direct
 > 0-40A use shunt and mV Voltmeter
 4-20 mA
 Can be driven from a transducer output

Input - Voltage

0-50mV to 0-800V Direct connected
 APM489-48 500V Maximum

Display

Scales are linear and calibrated from zero to full scale
 scaleplates are available in any process unit including:
 A, V, °C, bar, rpm, kW and %
 Available in shortscale (90° sweep)
 And longscale (240° sweep)
 ±1.5% max. error

Voltage Drop:

-Ammeter <100mV

Current Consumption:

-Voltmeter <200V 1mA, >200V 200uA

Customer Termination

The customer gains entry at the rear via 2 stud connectors

Panel Fixing Detail

The customers panel cut out hole needs to be 45mm square with the enclosure held into the panel by clamp.

The customers panel must be no more than 12mm thick

Environmental Conditions

Storage Temperature -40 to 70°C

Operating Ambient -15 to 55°C

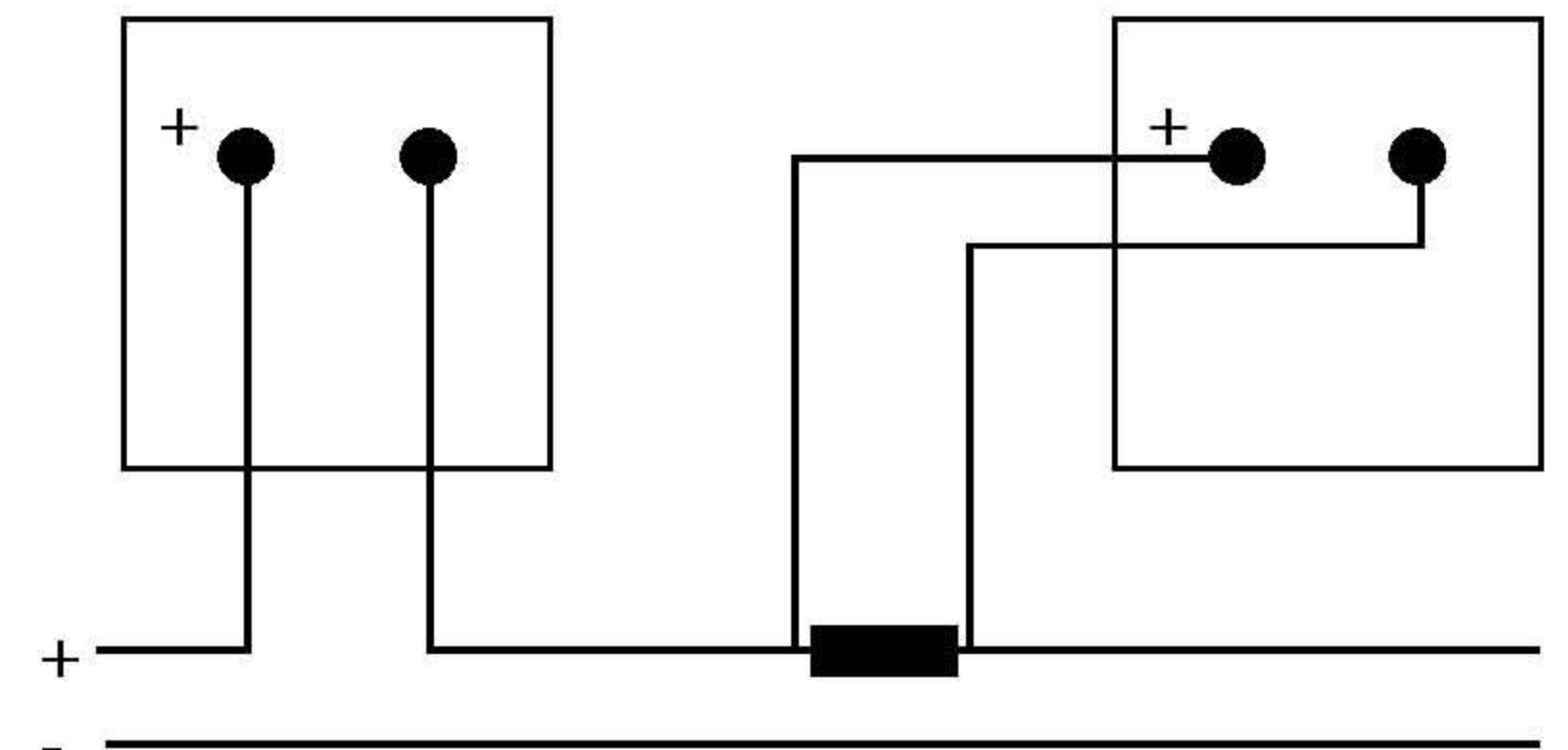


WIRING

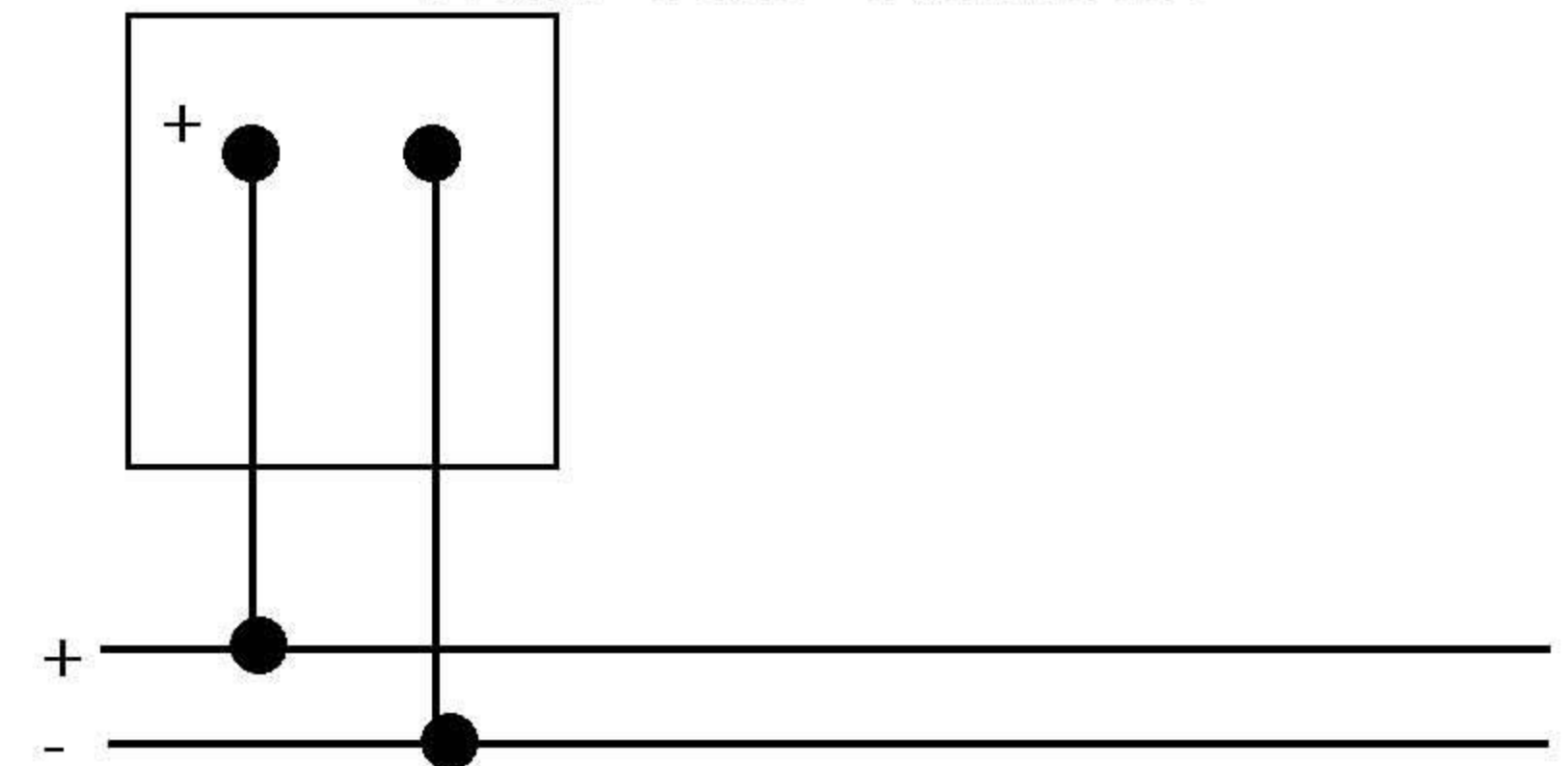
Rear View-Ammeters

Direct connection

Shunt operated



Rear View-Voltmeter



Dimension:

Bezel size: 48 x 48 mm

Cutout Size: 45 x 45 mm

Depth: 83 mm Including terminal cover

63 mm including terminals (no cover)

Note:-

Unit should only be removed from its enclosure from the front.

APM489-72 Moving Coil Meter

Moving coil meters are suitable for measurement of DC current or voltage. All meters have a jewel and pivot movement which ensures reliability and Accuracy.



Technical Specifications

Input - Current

0-50uA to 0-40A direct connected
 > 0-40A use shunt and mV Voltmeter
 4-20 mA
 Can be driven from a transducer output

Input - Voltage

0-50mV to 0-800V Direct connected

Display

Scales are linear and calibrated from zero to full scale
 scaleplates are available in any process unit including:
 A, V, °C, bar, rpm, kW and %
 Available in shortscale (90° sweep)
 And longscale (240° sweep)
 ±1.5% max. error

Voltage Drop:

-Ammeter <100mV

Current Consumption:

-Voltmeter <200V 1mA, >200V 200uA

Customer Termination

The customer gains entry at the rear via 2 stud connectors

Panel Fixing Detail

The customers panel cut out hole needs to be 68mm square with the enclosure held into the panel by clamp.

The customers panel must be no more than 10 mm thick

Environmental Conditions

Storage Temperature -40 to 70°C

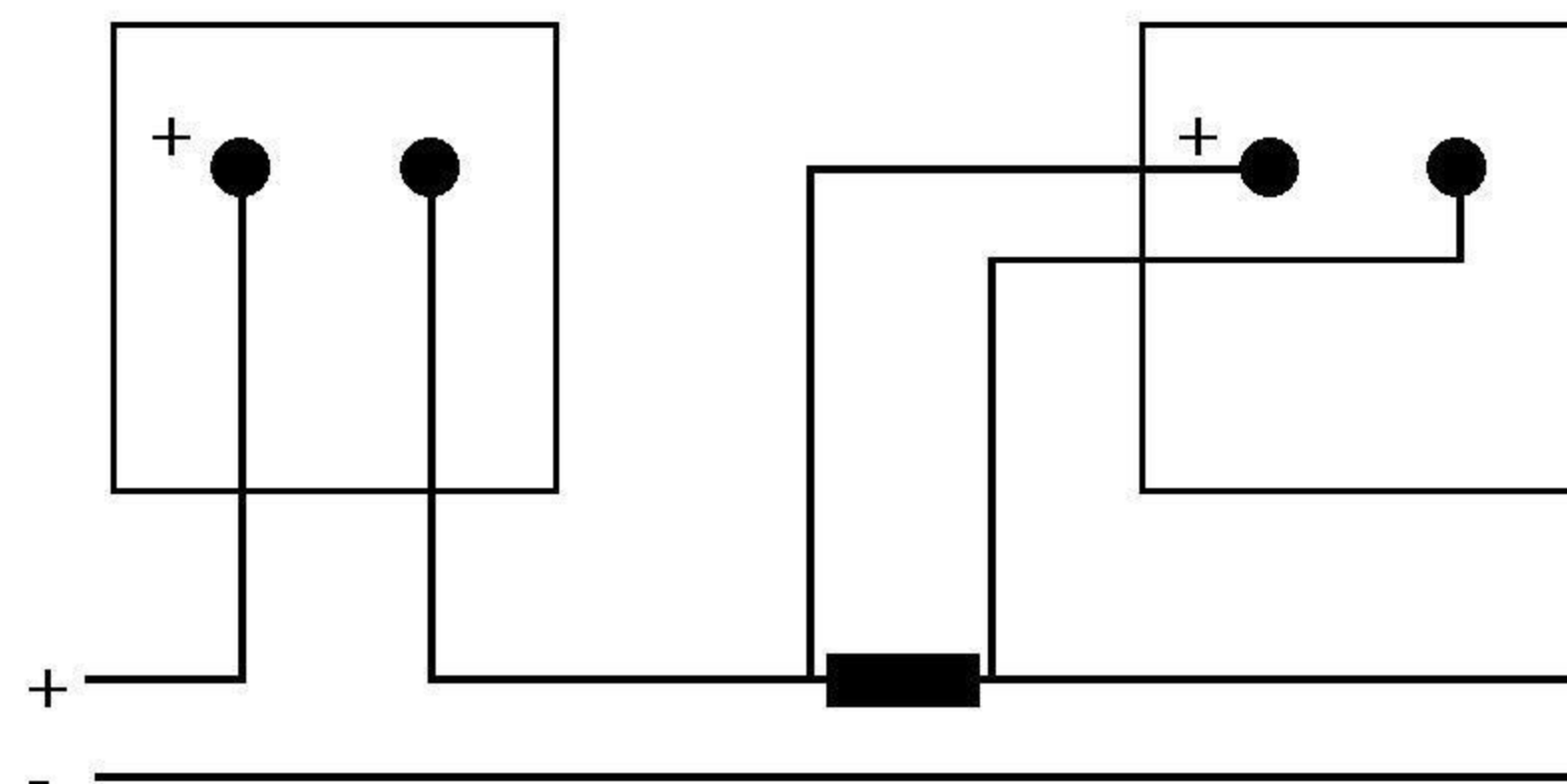
Operating Ambient -15 to 55°C

WIRING

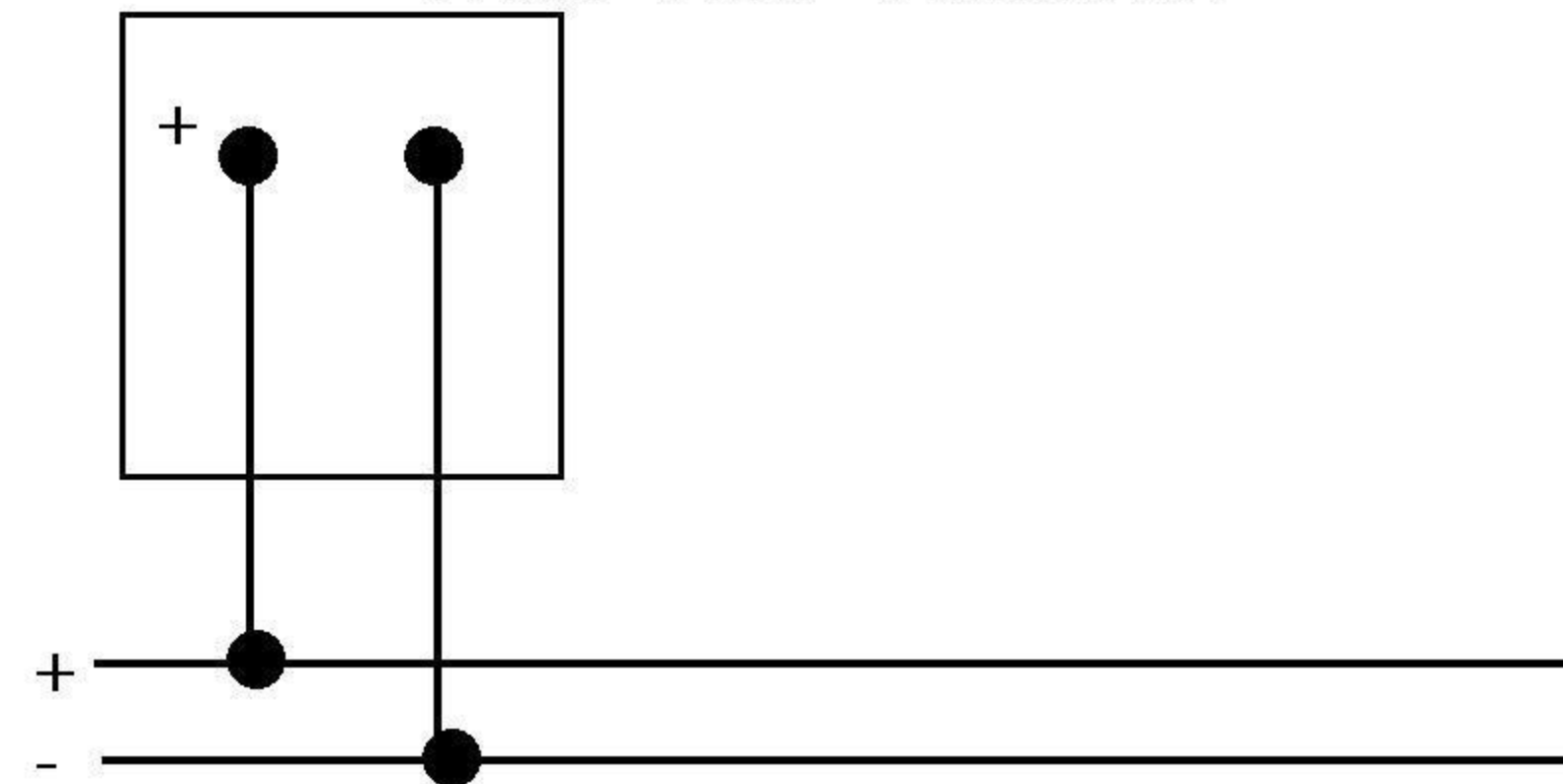
Rear View-Ammeters

Direct connection

Shunt operated



Rear View-Voltmeter



Dimension:

Bezel size: 72 x 72 mm

Cutout Size: 68 x 68 mm

Depth: 60 mm Including terminals

Note:-

Unit should only be removed from its enclosure from the front.

APM489-96 Moving Coil Meter

Moving coil meters are suitable for measurement of DC current or voltage. All meters have a jewel and pivot movement which ensures reliability and Accuracy.

Technical Specifications

Input - Current

0-50uA to 0-40A direct connected
 > 0-40A use shunt and mV Voltmeter
 4-20 mA
 Can be driven from a transducer output

Input - Voltage

0-50mV to 0-800V Direct connected

Display

Scales are linear and calibrated from zero to full scale
 scaleplates are available in any process unit including:
 A, V, °C, bar, rpm, kW and %
 Available in shortscale (90° sweep)
 And longscale (240° sweep)
 ±1.5% max. error

Voltage Drop:

-Ammeter <100mV

Current Consumption:

-Voltmeter <200V 1mA, >200V 200uA

Customer Termination

The customer gains entry at the rear via 2 stud connectors

Panel Fixing Detail

The customers panel cut out hole needs to be 92mm square with the enclosure held into the panel by clamp.
 The customers panel must be no more than 9 mm thick

Environmental Conditions

Storage Temperature -40 to 70°C

Operating Ambient -15 to 55°C

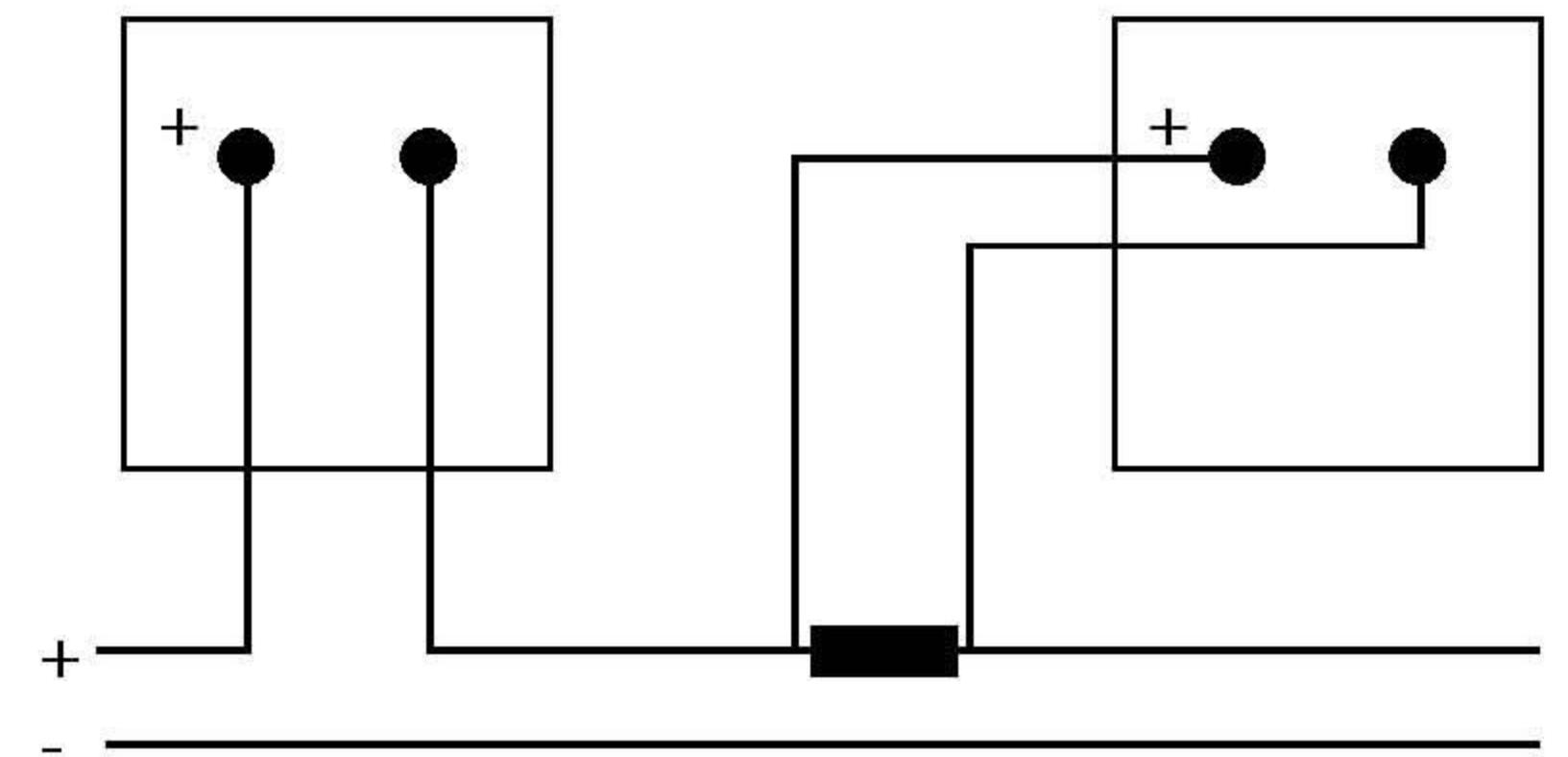


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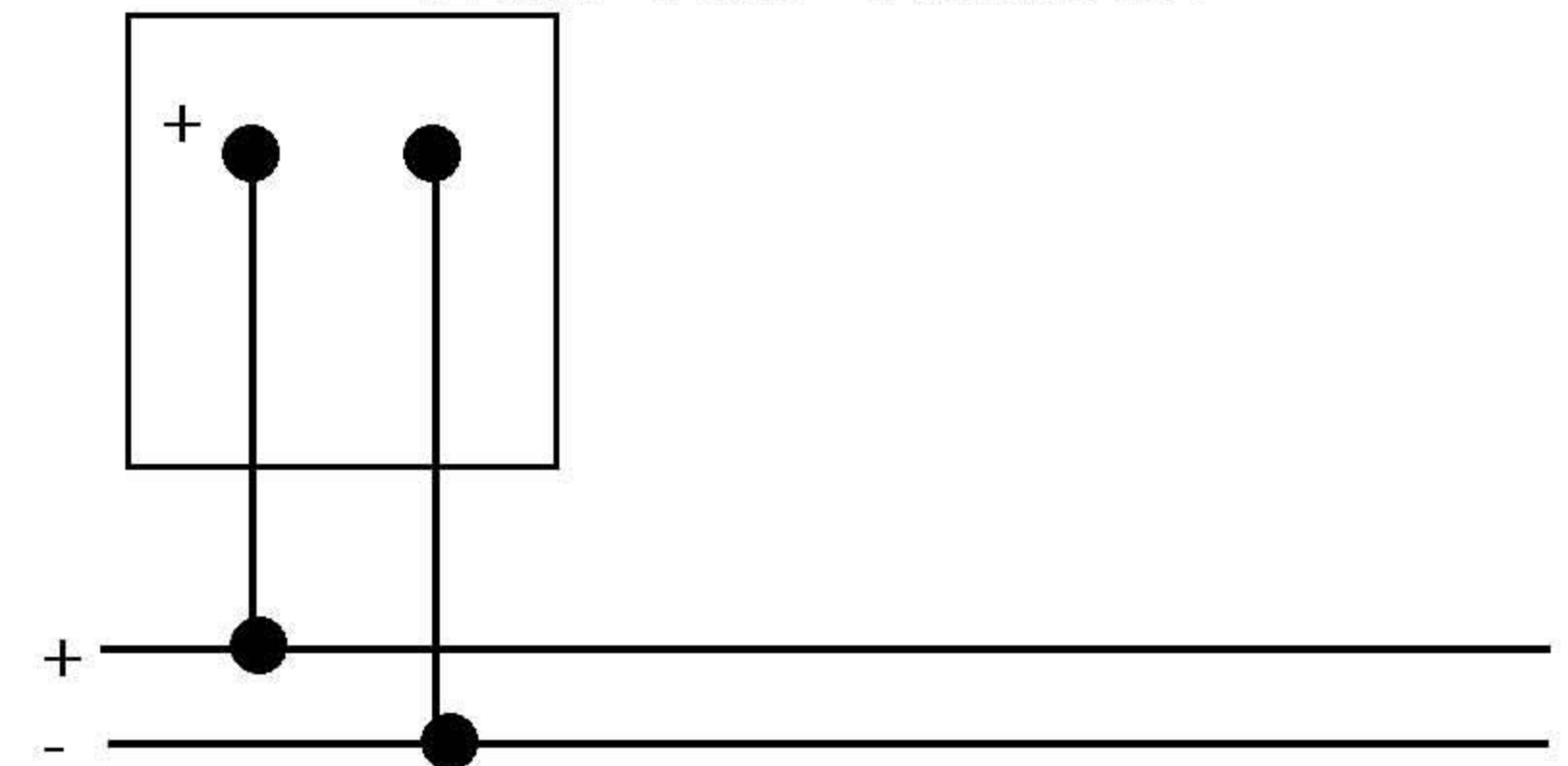
Rear View-Ammeters

Direct connection

Shunt operated



Rear View-Voltmeter



Dimension:

Bezel size: 96 x 96 mm

Cutout Size: 92 x 92 mm

Depth: 66 mm Including terminals

Note:-

Unit should only be removed from its enclosure from the front.